

gations prove that the Hudson Bay route is entirely impracticable. Navigation would be hazardous, and for only a short period of the year. Even the St. Lawrence route, with all its recent improvements, cannot obtain sufficiently low insurance rates. What rates could be obtained, then, on the Hudson Bay route?

Would it not be better for the Dominion government to concentrate its efforts upon the development of ports and routes which have already proved their merits? Montreal, for instance, cannot cope with the enormous business going that way. The present facilities there are not equal to the business offering, despite the energy and enterprise of the Harbor Commission. Montreal has every right to be considered one of, if not the leading of our national ports. If immediate steps are not taken to keep pace with the business, it will drift to foreign channels. The fact that many large grain boats were kept waiting there so long, that the owners were compelled to take their vessels off that route, is a serious matter, and but an indication of the more serious consequences which might easily follow. Our winter ports, too, should be improved materially.

Little has been done to make Vancouver the great ocean port it should, and must be, if it is to gain materially from the opening of the Panama Canal. Mr. Monk, the Minister of Public Works, was, unfortunately, correct when he stated that we are a quarter of a century behind in our port development. This is a matter for earnest consideration. The Hudson Bay scheme should be abandoned by the Government, with a frank statement that the proposed route is too hazardous and quite impracticable.

THE MEDICAL HEALTH OFFICER AND THE ENGINEER.

The duties of the medical health officer and his general relationship to the public are too well known to warrant comment. His manifold activities may be noted by a glance over the programme of the second annual congress of the Canadian Public Health Association, which was published in last week's issue. The work of the engineer, which is peculiarly his own, is also well known. The lack of a clear definition of the relations of the engineer and the health officer has, however, led in the past to an enlargement of the power and duties of the latter beyond, in some respects, what is to the best interest of the public.

The engineer as a sanitarian comes into close touch with the medical health officer. To-day the lines along which the activities of municipal sanitary engineers are being devoted are the problems of water supply development, the consideration of sewerage and sewage disposal, the matter of city waste disposal and street cleaning, the proper conduct of construction camps, and the improvement of general health conditions by swamp drainage and other engineering work.

Quoting Section 89 of the Public Health Act of Ontario, the Act states:—

"Whenever the Council of any Municipality or any municipal board or commission or any company or person contemplates the establishment of or the extension of or any change in an existing waterworks system, they shall submit the plans, specifications, and an engineer's report of the water supply and the works to be under-

taken, together with such other information as may be deemed necessary to the Provincial Board, and no such works shall be undertaken or proceeded with until the source of supply and the proposed works have been approved by the Board.

"The Board upon the application for such approval may direct such changes to be made in the source of supply or in the plans submitted as it may deem necessary in the public interest."

Section 94 of the same Act states:—

"Whenever the construction of a common sewer or of a system of sewerage or an extension of the same is contemplated by the council of any municipality, the council shall first submit the plans and specifications of the work together with such other information as may be deemed necessary by the Provincial Board, for its approval.

"The Board shall inquire into and report upon such sewer or system of sewerage, as to whether the same is calculated to meet the sanitary requirements of the inhabitants of the municipality; and as to whether such sewer or system of sewerage is likely to prove prejudicial to the health of the inhabitants of the municipality, or of any other municipality, liable to be affected thereby.

"The Board may make any suggestion or amendment of the plans and specifications or may impose any condition with regard to the construction of such sewer or system of sewerage or the disposal of sewage therefrom as may be deemed necessary or advisable in the public interest."

We have the greatest of confidence in the Ontario Provincial Board of Health. The work of the Board has been eminently satisfactory in the past, particularly since the present medical health officer, Dr. McCullough, has been installed. In many ways, however, the engineer, from the nature of his education and professional training and experience, is the best person to pass final judgment on questions of engineering practice. It will be agreed that there is a necessity for a central organization to pass on the plans for water supply and sewerage systems throughout the provinces, and it will be conceded that the provincial Boards of Health are the proper bodies for this work, as by this means centralization of authority and responsibility is fixed.

We believe that some means should be taken for having engineering advice given to the Board of Health regarding plans submitted to them for their approval and for advice regarding all the purely engineering details which inevitably arise when questions of water supply and sewage disposal are considered. Some of the provinces have already made provision for such advice by the appointment of a resident sanitary engineer under the direction of the Provincial Board of Health, and with the additional safeguard of employing consulting engineers. We do not offer any suggestion as to the method to be employed in securing this advice, but we must emphasize strongly the necessity for the securing of the assistance of expert sanitary engineering experience to co-operate with the Provincial Boards of Health.